

is negative and 63.6% (14/22) when the sentinel lymph node is positive. This is in comparison to MSLT's findings of 9.7% (62/642) when the SLN is negative and 26.2% (32/122) when the SLN is positive.

**Conclusions:** Our identification rates and incidence of positive nodes are comparable to MSLT. However our false negative and mortality rates fall short of these standards. The procedure of SLNB should correctly identify the SLN, and this failure rate has prompted us to consider other forms of identification of the SLN such as PET and CT scanning. We will continue to audit our outcomes.

#### 0810: HAND INFECTIONS – HOW DEEP IS THE PROBLEM?

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**Aim:** Hand infections can be broadly anatomically defined as superficial or deep with important clinical implications. This study aims to determine the most likely pathogen responsible in each type in order to provide optimum treatment, aiding successful eradication of the causative bacterium.

**Method:** The microbiology database of Sheffield Teaching Hospitals was retrospectively accessed from 2006 to 2012 using specific search criteria to capture all hand infection data. Patients with both superficial and deep positive cultures for one episode of infection were manually selected.

**Results:** 23/5531 patients were identified with positive cultures at both anatomical planes. The most common organism overall was Methicillin-sensitive *Staphylococcus aureus* (MSSA), followed by *Streptococci* and anaerobes. MSSA had the highest incidence in both superficial and deep swab cultures. 22/23 (96%) patients had superficial and deep cultures with matching bacterial profiles. Antibiotic assays for MSSA show that based on superficial cultures, 52% of patients should respond to Flucloxacillin, likewise 61% of patients with deep cultures.

**Conclusions:** Our results show that Flucloxacillin is the most suitable antibiotic for hand infections, in both superficial and deep planes of infection. Furthermore, in either case, addition of Penicillin and Metronidazole should be considered for coverage of *Streptococci* and anaerobes respectively.

#### 0816: THE USE OF VENOUS COUPLER DEVICE IN END TO SIDE ANASTOMOSES IN HEAD AND NECK FREE TISSUE TRANSFER (FTT)

Billy Wong, Nakul Patel, Amer Durrani. Cambridge University Hospital NHS Trust, Cambridge, UK.

**Introduction:** The use of venous anastomosis coupling systems is routine in microvascular FTTs. Venous end-to-side anastomosis using a couple device has not been well established. The head and neck region is therefore unique in that the internal jugular veins provide a large calibre which allows end-to-side anastomoses.

**Aim:** To demonstrate the feasibility, safety and efficacy of venous end-to-side anastomoses in head and neck reconstructions.

**Material and Methods:** A retrospective review of 41 consecutive head and neck free flap reconstructions performed at by the senior surgeon over one year were reviewed. Patients' demographic features including age, gender, and tumor location, type of FTT, recipient vessels, and coupling device diameter were collected. Complications of the free tissue transfer were noted.

**Results:** A total of 12 end-to-side anastomoses were undertaken in 9 patients. Of which, 6 were critical anastomoses (only venous anastomosis for a given free flap). The venous calibre ranges from 2.5mm to 4.0mm. There were no anastomotic or flap related complications in our series.

**Conclusion:** End-to-side anastomosis using the internal jugular is a safe and effective in appropriately selected patients.

#### 0828: EARLY EXPERIENCE OF LIP VOLUME ENHANCEMENT USING A NEW PRODUCT AND NEW TECHNIQUE

Kerry Davies, Dionysia Vasdeki, Taimur Shoaib. Canniesburn Plastic Surgery Unit, Glasgow, UK.

**Introduction:** We investigated the use of a new product Volbella using a technique hypothesized to create volume with reduced bruising. Ten patients were treated. Filler was injected into the junction of the wet lip and the dry lip at the junction between the orbicularis oris muscle with the sub-labial fat.

**Methods:** Pre and post filler questionnaires were recorded and results tabulated. Four doctors reviewed pre and post-treatment photographs regarding bruising and lip volume. Mean filler volume for each of the ten subjects was assessed using both the Medicis Lip Fullness Scale and the Photonumeric scale. Mean values and the change in lips volumes were calculated.

**Results:** Patient satisfaction was high, pain was minimal and bruising was almost completely eliminated allowing an immediate return to normal function without the need for camouflage.

Mean pre-filler volume of the upper lip was 2.5 and lower lip was also 2.5. Mean post-filler upper lip was 3.0 and lower lip 3.5. There was a 0.5 increase overall in lower lip volume ( $p < 0.001$ ) and 1.0 for the lower lip ( $p < 0.001$ ).

**Conclusion:** Our initial experience with Volbella as a lip filler using this technique is favourable and we encourage further long-term studies to determine long-term satisfaction.

#### 0833: E-LINK HAND THERAPY: PATIENT IMPACT

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**Introduction:** E-link is a complimentary rehabilitation tool used by the Hand Therapy Clinic (HTC) at Pinderfields Hospital, Wakefield. It is used in combination with occupational therapy and physiotherapy for a variety of hand and wrist trauma patients. This computer based rehabilitation therapy, engages patients using simple games to evaluate and improve grip strength.

**Method:** Treatment is provided over a 4-week period, after which the patient is reviewed at the HTC. If improvements in function are seen a further 4-week therapy schedule is arranged. Patient data is recorded measuring various pinch/grip strengths and range of movements across joints.

**Advantages:** E-link is a flexible rehabilitation method that can be tailored to specific patient needs, thus appropriate for a wide spectrum of injuries. Many grip strengths, commonly pinch grip and gross grip, are improved using this programme. Patients see improvements in their scores over time, which provides quantifiable positive feedback.

**Conclusions:** We find this programme a useful adjunct to the hand therapy programme. It is simple to use, tailored to specific functions required by individuals and a useful motivation tool. This programme also makes functionally targeted occupational therapy simpler and more efficient as long workshop sessions are usually not required.

#### 0849: THE RECONSTRUCTIVE APPROACH FOLLOWING SKIN CANCER EXCISION ON THE LOWER LIMB: IS FLAP CLOSURE PREFERABLE TO SKIN GRAFTING?

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**Aim:** Skin cancer excision may result in a deficit that cannot be closed directly, requiring reconstruction using a local flap or skin grafts. We compared the post-operative outcomes of flap and graft repair for skin cancer excision on the lower limb (ankle to knee).

**Method:** All skin cancer excision, receiving either flap or graft repair, performed in the last 5 years on the lower limb in St Andrews Centre (Mid Essex Hospital Services NHS Trust), were identified. Malignant melanoma cases were excluded as these require further treatment. Patient demographics, co-morbidities, lesion characteristics and post-operative complications (infection, readmission, failure and delayed wound healing) were identified and compared between the flap and graft repair groups.

**Results:** 789 skin cancer lesions were repaired using either flap or skin graft in the last five years. 149 cases (77 flaps, 72 grafts) were identified for analysis. In the flap repair group 26.0% of cases noted post-operative complications compared to 43.1% in graft repair group ( $p < 0.03$ ). Failure rate was significantly higher in the graft repair group than the flap repair group (20.8% vs. 9.09%;  $p = 0.04$ ).

**Conclusions:** Flap repair after skin cancer excision is preferable compared to graft repair due to a lower rate of post-operative complications.

#### 0866: CURRENT OUTCOMES IN THE SURGICAL MANAGEMENT OF PAEDIATRIC DYSPLASTIC NAEVI

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